

## Secular stagnation, low growth, and financial instability

Luiz Carlos Bresser-Pereira

*International Journal of Political Economy* 48  
(1), 2019: 21-40.

**Summary:** Rentier-financier capitalism, neoliberalism and globalization have been in crisis since 2008. It is characterized by low growth rates, quasi-stagnant wages and increase of inequality since rentiers replaced business entrepreneurs, neoliberalism became the hegemonic ideology, and globalization became the means to achieve the best of all possible worlds. But the rich capitalist world faces the threat of secular stagnation. In this paper, I discuss this threat, the main authors who have been discussing it, and the new historical facts that are behind such threat. Among the threats are the fall of the productivity of capital associated with information and communication technology, the increase of market power, the profusion of capitals, and globalization, that opened room for the successful competition of developing countries. These new historical facts don't cause stagnation, but low growth rates and general uneasiness.

**Key words:** stagnation, growth, financialization, profit rate, financial instability, rentier-financier capitalism

**JEL classification:** O10.

Rentier-financier capitalism, neoliberalism and globalization have been in economic crisis since 2008, and in political crisis since 2016, while the secular stagnation theme is back. If, following the Financial Times' Lexicon, we define secular stagnation as "a condition of negligible or no economic growth in a market-based economy" and we add that this condition is associated to a long-term decline in productivity, the economic performance of rich countries since the mid 1970s will be a case of secular stagnation.<sup>1</sup> The small growth rates together with increased financial instability and increasing economic inequality that defined the last 40 years have several causes and are associated to the return of capitalism to economic liberalism – a form of economic and political organization inherently unstable and inefficient. The consequence was 2008 global financial crisis and the political crisis expressed in the Brexit and the election of Donald Trump. The political discontent is further substantively related to the poor economic performance and the increasing economic inequality of the rich countries. That discontent is also because of the lack of a minimal degree of social empathy on the part of today's rentier and financier elites toward the workers and the poor. Both the economic and political crises happened after capitalism underwent two major structural changes and turned into a rentier-financier capitalism. One, is old and well-known: the handover of management of the major corporations from business entrepreneurs to professional technobureaucrats. The second, more recent, was the transference of the ownership of those major corporations from the same business entrepreneurs to the rentier capitalists associated with a special class of technobureaucrats, the financiers, who manage their

---

Luiz Carlos Bresser-Pereira is emeritus professor of Getúlio Vargas Foundation. I am indebted to Gustavo de Almeida Lopes Fernandes and to two referees of this journal for their comments. [bresserpereira@gmail.com](mailto:bresserpereira@gmail.com) [www.bresserpereira.org.br](http://www.bresserpereira.org.br)

wealth and play the role of organic intellectuals in defining neoliberalism as their ideology.

Poor economic performance and political malaise are historically recent facts. They have succeeded the Golden Years of Capitalism (1946-1975), which were characterized by rapid growth rates and a generalized increase in living standards. Why did things change? Why have the growth rates fallen in the developed world, beginning in the 1980s? Why has inequality increased so much? Why did the two major social advancements – the welfare state and the labor contracts that protected the poor – have come under attack? Why have the reasonable level of social solidarity, that had been achieved in the Golden Years, waned out and the intensity of class struggle increased? Why is there an inversion in this struggle? The workers are no longer the workers fighting business entrepreneurs to achieve higher wages and better working conditions, but the rentiers and financiers are defending reforms that reduce direct and indirect wages. To explain this shift, we need additional and more specific new historical facts that changed capitalism. We need to understand the changes that happened in the ruling classes and opened room for a liberal class coalition to replace the developmental or Fordist coalition.

I call present-day capitalism “rentier-financier capitalism” so that we can analyze it from the standpoint of the nature of its ruling class, which remains a capitalist class, but it is no longer an entrepreneurial class. The constant celebration of entrepreneurs as heroes of capitalism and the exceptional cases of some very successful entrepreneurs in the information technology industry show the dynamic character of capitalism, but don’t change the increasing lack of relevance of entrepreneurs in rentier-financier capitalism. Now the ruling class is mainly a rentier capitalist class associated with the top professional class – specifically the executives that manage the large corporations and the financiers. In classical or entrepreneurial capitalism, the ruling class comprised business entrepreneurs, the professional middle class, and the decadent aristocracy. In technobureaucratic capitalism, professionals replaced business entrepreneurs in the management of corporations. In rentier-financier capitalism, the entrepreneurs lost space to rentiers, who are now the owners of the capital, while technobureaucrats kept their role in managing the corporations (the top executives), and assumed the management of rentiers’ wealth (the financiers). As the rentiers form an essentially idle class, they play a similar, although intrinsically different role that the aristocracy played in the transition from feudalism to capitalism. This change in the ruling classes, plus the change from a capitalism based on domestic markets and international trade to one based on globalization (i.e., to a capitalism based on the formation of a global market, where multinational corporations engender a global productive integration) caused major consequences for the dynamics and stability of capital accumulation and growth.

### **Rentier-financier capitalism**

The change from entrepreneurs’ capitalism to technobureaucratic capitalism is well-known. It dates from the Second Industrial Revolution – the dawn of electricity, the combustion engine, the assembly line, and scientific management. There is a large literature on the subject.<sup>2</sup> In the social formation the new shift from capitalist entrepreneurs to technobureaucrats was given many names: managerial capitalism, new middle-class capitalism, knowledge capitalism, state-led capitalism. I called it technobureaucratic capitalism to emphasize the mixed character of the social formation dominant in the developed countries after World War II, combining market and state economic coordination. It is a type of society that should be distinguished, on the one

hand, from liberal or classical capitalism that had existed previous to the Great Depression, and, on the other hand, from statism or technobureaucratism, of which the Soviet Union was the paradigmatic case.

Technobureaucratic capitalism turned dominant after the Great Depression and after the failure of the liberal or business entrepreneurs' capitalism – the social formation that Marx had analyzed and criticized. After the Second World War, Franklyn Delano Roosevelt on the political side, John Maynard Keynes on the economic side, Henry Ford on the business side, and the people empowered by the universal suffrage opened the door for a social and developmental capitalism, for a broad class coalition that came to be called either Fordism or the Golden Years of Capitalism. The triumph of this social and developmental class coalition was marked not only by high growth rates and some reduction of inequality; additionally, it eluded major financial crises. But that very triumph created the conditions for a second major change in capitalism. After the war, the business entrepreneurs who had transferred the management of the major business enterprises to technobureaucrats, had their ownership transferred to their sons and grandsons – the capitalist rentiers – who live of interests, dividends and real state rents. Yet, rentier capitalists are a poor or talent-deficient dominant class when compared with either the business entrepreneurs or the top technobureaucrats. This explains why a special kind of technobureaucrat – the financiers – assumed the task of managing or “investing” the rentiers' huge wealth and, at the same time, played the role of the rentiers' organic intellectuals by defending neoliberalism.

At the same time, in universities and think tanks the old liberals, who had been defeated by the new stability achieved by the Keynesian policies and the Bretton Woods agreement, were waiting for an opportunity to resume their prestige and influence. The fall in profit rates and stagflation in the 1970s was their opportunity. A neoclassical macroeconomics soon became dominant. While Keynes' macroeconomics was a blueprint for governments to avoid financial crises, and reduce their length and severity, the new macroeconomics, originally called Monetarist and later New Classical or New Keynesian economics, was a justification for governments' hands off the economy. From the 1970s, the new macroeconomics, now founded in the “rational expectations hypothesis”, became the basis for a “new science”, and financial macroeconomics focused on the “efficient markets hypothesis”. Large and competitive financial markets caused “financial deepening” (an increase of private debt in relation to GDP) that would assure, on the one hand, low inflation and financial stability, and, on the other, increasingly better allocated savings and higher growth. As Robert Lucas, then president of the American Economic Association and the main name behind the new macroeconomics, famously said in 2003, “the central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades”.<sup>3</sup> Paradoxically, at a moment in which the income and the power of rentiers and financiers increased dramatically, the mainstream macroeconomics continued to see money as neutral (having no role in economic equilibrium) and continued to ignore the financial system. As Adair Turner (2016: 31) remarked,

Modern macroeconomics and central bank practice gravitated to the assumption that the monetary workings of the economy could be captured by models from which the banking system was almost entirely absent.

Keynesian macroeconomics and the 1950s' development economics or classical developmentalism were the two heterodox economic schools that were dominant in Fordism. They took for granted that capitalism was a business entrepreneurs' capitalism, had full employment and growth as their main objectives, to be achieved by a moderate

intervention of the state in the economy. After the Second World War, in the time of Fordism, at the peak of the American hegemony, top business executives were the American new heroes together with the business entrepreneurs. That changed in the 1970s, beginning with the influential article of Milton Friedman (1970), where he argues that the social responsibility of business is to increase its profits; a corporate executive is the employee of the owners of a (public) company and has a direct responsibility to his employers. From then on, in the terminology of financial markets and of academic new institutionalism, shareholders were called “investors”, while in the new-institutional academic wave, shareholders were supposed to be the “principal”, and the executive, the “agent” in managing the corporations. Colin Crouch (2011: 103) identified the “Anglo-American shareholder maximization concept... under it, and in opposition to stakeholder concept that for some time prevailed in Europe, the sole goal of the corporation is to maximize value for the shareholder”.

Yet, Keynes, already in 1936, when he published *The General*, was not happy with the growing power of the rentier capitalists, of an idle social class, and spoke briefly on the “euthanasia of the rentiers”. In this matter, he was following Thorstein Veblen’s critical view of the “leisure class” and its conspicuous consumption. Today, rentier-capitalists’ “hero” is Warren Buffet, but Robin Harding, writing significantly in the *Financial Times* (September 21, 2017), has a different view of this public figure, beginning with the title of his article: “How Warren Buffet broke American capitalism”. His words:

“However much you admire the man, his influence has a dark side because the beating heart of Buffettism, celebrated in a thousand investment books, is to avoid competition and minimize capital investment in the real economy. A torrent of recent studies show how exactly those forces — diminished competition, rising profits and lower investment — afflict the US.”

A new study by Tim Koller, James Manuika and Sree Ramaswamy (2017) took 600 firms and labelled some as short-termist if they exhibited five habits: (1) investing relatively little, (2) cutting costs to boost margins, (3) initiating lots of buy-backs, (4) booking sales before customers pay and (5) hitting quarterly profit forecasts – five typical characteristics of rentier dominated companies. The study concludes that 73% of firms are short-termist.

### **Why only after the war?**

Why only after the Second World War and particularly after the neoliberal turn in 1980, had rentier-financier capitalism turned into reality? Why had critical economists, such as François Chesnais (1992), Coutinho and Belluzzo (1998), Michel Aglietta (1999), Robert Boyer (2000), Engelbert Stockhammer (2004), Gerald Epstein (2005), Robert Guttmann (2008, 2016), Eckhard Hein (2012) started to write on financial capitalism, finance-led capitalism, and financialization? And why do I choose to call this new reality, rentier-financier capitalism? Financial capitalism is a bad name, because it may lead us to confuse this new reality with Hilferding’s (1910) classical concept of financial capital: the predicted fusion of banking and industrial capital under the great banks. This forecast didn’t materialize. Financialization is a good word, that I also use: it means that the financial sector has grown strongly in relation to the “real” economy. There was an immense growth of the financial sector’s share of GDP, of its profits, and of its influence – a growth experienced not only by the major banks, but by the much larger financial system, their financiers and their economists. François Chesnais was the first to detect

this new reality. Others followed, but they have put too much emphasis on the financial institutions and on the financiers and left the rentiers on a second tier. I propose the expression rentier-financier capitalism, because this expression gives to financialization a broader historical and sociological meaning.

I argue that these rentiers are the real capitalists of our time. For sure, rentier capitalists have existed since the dawn of capitalism, and it would be reasonable to predict that the incessant capital accumulation would soon lead to an excess of accumulated capital. But, as Schumpeter (1911) recognized so well, the role of the business entrepreneur was so strategic to the national economies that we understand why entrepreneurs were privileged in relation to rentiers. Yet, at the time when Schumpeter published his classical work, top executives were already replacing business entrepreneurs in the United States. On the other hand, two new historical facts (the Keynesian revolution, which offered to the states a powerful weapon to reduce the severity of economic crises, and the fact that the world does not face major wars since 1945) stopped the chronic and radical destruction of accumulated capital that kept relatively balanced the supply and the demand for capital and made rentiers very rich. At the same time, the demise of business entrepreneurs continued. Their resurgence in the information and communication technology companies in firms that required modest capital investment and much innovative capacity, as well as their resilience in the medium-size German manufacturing firms show that they will not disappear. But we should not be mistaken. Today's capitalism is a rentiers' capitalism, where capital is owned by rentiers, not by entrepreneurs, and where technobureaucrats manage the wealth of rentiers and the corporations. This means that the logic of capitalism changed from a logic based on profit, capital accumulation, and innovation, to a logic of (1) rents (high interests, dividends and real-state rents), (2) control of inflation, and (3) control of general indebtedness – to keep the public and private debt at the maximum consistent with the state remaining solvent. Rentiers and financiers share these three objectives, but they know that the third one is risky. The financial sector found other sources of profit, but the logic of finance remains debt; their profits depend on how much they loan not only to the private but also to public sector. And debt has increased enormously in rentier-financier capitalism. Adair Turner (2016: 22, 74), who is a firm critic of debt, believes that the 2008 crisis was less a problem of the banks and more of the private debt of advanced economies, which increased from 55 percent of GDP in 1950 to 160 percent in 2010. As he puts it, "...the big problem we faced was not an impaired financial system but a severe debt overhang in the real economy". Was the increase in debt, not only of the private sector but also of the public sector, inevitable? Some debt is necessary to finance investment of firms and to finance the purchase of homes, but the increase of the private debt went far above the corresponding requirements. The increase in public debt was also sizable, but, contrarily to common understanding, it is better under control than the private debt: while the public debt is permanently controlled by governments, the media, the risk agencies, and the international agencies, the private debt goes often unnoticed. The private debt caused the 2008 global financial crisis and the 2010-16 Euro crisis; the public debt was its consequence. The cost of bailing out the banks in the two crises as well as the cost of the countercyclical policy that all rich countries adopted was the reason why the Great Recession didn't turn into a Great Depression, but the public cost was enormous.

Instead of speaking of rentier-financier capitalism, we may speak of neoliberalism, if our criterion is ideology, and of globalization, if it is the greater or smaller degree of economic "integration" of capitalism at the world level. The three concepts, which are in the title of this essay, are correlated but autonomous. We may say that globalization is

consequence of neoliberalism, because the opening of international markets is a demand from economic liberalism and involves greater trade integration, but globalization is more than that. There was already trade integration at the end of the nineteenth century, the so called “first globalization”. The novelty brought by globalization was the rise of the multinational corporations after the Second World War, and the increasing productive integration that they caused. Second, the alternative to economic liberalism (pure market coordination of national economies) is developmentalism – a combination of market coordination and state economic coordination, the latter coordinating what the market is unable to do: the non-competitive sectors of the economy and the five macroeconomic prices.<sup>4</sup> Thus, it is a mistake to equate globalization with economic liberalism. Although globalization was from the beginning (around 1980) a banner held by rich countries, the country that most profited from globalization is China, whose state and capitalism are developmental, not liberal. The new competition coming from low wage developing countries certainly pressed down the profit rate but cannot be associated to the process of secular stagnation.

In this paper, my concern is with the prospects of the world economy, or of capitalism. I am specifically interested in discussing the secular stagnation issue in terms of these three realities: a narrow class rentier-financier class coalition; the profusion of capitals in rich countries, and the major change brought by financialization. In the same vein of Servaas Storm (2018: 321), I ask “why the global political economy morphed from post-WWII ‘mixed’ industrial capitalism to a neoliberal ‘rentiers’ delight’, and how to confront the Panglossian logic and arguments used by (financial) economists to legitimize the financialized order as the ‘best of all possible worlds’”.

### **Supply side explanations**

The Neoliberal Years of Capitalism were the response of neoclassical economics to the 1970s falling profit rate. As we will see, the new policy regime succeeded in recovering the profit rate, but the investment and the growth rates remained very low. As David M. Kotz (2015: 155-176), who views the dynamic of capitalism as the social structure of accumulation, capitalism faces a structural crisis that conventional economics has proved unable to resolve.

“To neoliberal capitalism to resume functioning effectively as a social structure of accumulation, it would have to remain able to promote rising profitability by keeping wages down while solving the resulting demand problem through debt-fueled consumer spending... Such prospect appears highly unlikely.”

The poor economic performance of capitalism since the 1970s and slow recovery of rich economies following the 2008 crisis brought back the theme of secular stagnation. The thesis was drafted by Adam Smith and theorized by David Ricardo and Marx. For Ricardo, it came from the prediction of a long-term fall in the profit rate due to the decrease of the productivity of land (due to the occupation of less and less fertile lands); for Marx, it was because of the fall in the productivity of capital. Although the two models were logical, their premise – the fall in productivity due to diminishing returns – did not happen at all. The counter-tendencies to the fall in the profit rate – which Marx considered, but left in second tier of explanations – eventually prevailed. Both theories were on the supply side.

Considering Marx's falling profit rate theory, the fall in the productivity of capital (or the fall of the output-capital relation or the process of mechanization) happens because

technical progress is “capital-using”, that is, because firms adopt new types of machines that replace new types of labor and begun to replace it, but are less efficient than the machines previously turned efficient and replaced corresponding previous types of work. Thus, after all the competitors imitate the company that first adopted the new type of machine, the productivity of capital falls, as well as the profit rate. Such fall in the output-capital relation or the productivity of capital and the ensuing fall in the profit rate (if wages continue to increase with productivity) didn’t happen in rich countries between the 1870s to around the Second World War. In this period, technical progress became “neutral” because, in the historical process of capital accumulation, the “capital saving” technical progress (which involves increase in the productivity of capital) has counterbalanced the capital-using technical progress. On the other hand, technical progress is capital-saving or the productivity of capital is increasing when it results from the investment in more efficient machines, in replacing old machines by more modern machines, which cause the increase of the output-capital relation. Growth models usually assume a neutral technological progress, where the output-capital ratio or the productivity of capital is constant, because their authors suppose that the two kinds of technical progress compensate one another.

In the classical theory of distribution, including Marx’s theory, the wage rate was supposed to remain at the subsistence level. Marx just added that this subsistence level should not be defined in biological terms but in historical ones. Yet, real wages in the rich countries (taking United Kingdom and France as reference) did not behave as the theory predicted. From 1870, wages began to grow at about the same rate of increase of the productivity of labor – above the level of subsistence, but not above the social cost of reproduction of labor. That is why Bresser-Pereira (1986) reversed the theory of classical distribution, proposing that the profit rate, not the wage rate, was constant in the long-term, and divided the history of capitalism into phases according to the behavior of technical progress and the consequent behavior of the wage rate. He has considered the profit rate as a given and relatively constant in the long-term, notwithstanding fluctuating in the economic cycle, because a positive and satisfying rate of profit is a condition for the survival of capitalism. Thus, while there is no practical alternative to capitalism, while no economic system superior to capitalism in improving the standards of living of the people surfaces, policymakers will do whatever is required to maintain a satisfying profit rate.

In the post-war Fordism, computers were becoming increasingly cheaper, which meant the substitution of much more efficient machines for old ones, suggesting that technical progress was becoming capital-saving or the productivity of capital was increasing, and, thus, the profit rate was satisfying. It was a mistake that I made in my 1986 book. In the information and communication era, despite the falling prices of computers and robots, the substitution of machines for labor (which reduce the productivity of capital) supplanted the substitution of modern for older machines (which reduce the productivity of capital).<sup>5</sup> Thus, beginning in the 1970s, the productivity of capital, which had been relatively stable from 1870, should have fallen. It did fell in the 1970s, but, after that, notwithstanding the fall of productivity of capital, the profit rate recovered to a satisfying level. This was possible because in the new time of rentier-financier capitalism the neoliberal hegemony was instrumental in stopping the increase of wages according to the increase of productivity (something that was happening since the 1870s), and because they got involved in a new wave of mergers and acquisitions which increased their market power.<sup>6</sup> new ideology mounted an assault on the labor contracts and on the welfare state, while it ignored the fall in the competition level faced

by the corporations. Capitalism was rescued – a satisfying rate profit was assured – by the relative fall of the wage rate in relation to productivity and by the increased market or monopoly power of the corporations, but at the cost of the working class and at the cost of consumers: the workers in rich countries saw their wages turn quasi-stagnant, while consumers had to pay higher prices due to the monopolist increase of the profit margins. Following the same line of thought, Michel Husson (2012: 99) remarked that “neoliberal capitalism was able to re-establish its profit rate notwithstanding the relative exhaustion of the productivity gains”.<sup>7</sup> With the profit rate assured, the corporations continued to invest, but, given, on one side, the lack of opportunities of investments, and, on the other, the high financial gains that they achieve in financial markets, they increased their return on capital benchmark (Boyer, 2005), they are investing little, consistent with the low growth or the capitalist economies, and they are distributing dividends as much as possible.

Robert J. Gordon's view of the problem is a supply-side analysis, but it has nothing to do with the tendency of the profit rate to fall that we just discussed. He became interested in the problem of secular stagnation in early 1999, when he pointed out that productivity in the United States and other rich countries had fallen sharply since the mid-1970s. In his further work, “Is US economic growth over? Faltering innovation confronts the six headwinds”, Gordon (2012: 1) made clear his stagnationist thesis by questioning the assumption that has become dominant since World War II, namely that economic development would be an ongoing process without an end in sight. Gordon sees the century beginning in the 1870s with the Second Industrial Revolution as a “special century, although taking some time to produce effects”, because it was a period of great growth for the United States. The interval between 1920 and 1970, which he termed the “Great Leap”, was even more dynamic. The annual growth rate of income per person was 2.4% per annum, but there was a long gestation period between the harnessing of electricity and the result in terms of economic development: four decades. It is interesting that the Great Depression of the 1930s did not stop the Great Leap. On the contrary, as he argues in Chapter 16, “the normal operation of the economy, which was obscured by the Great Depression, was followed by the economic miracle of World War II ...” and by growth in the 1950s and 1960s that “clearly exceeded what would be expected based on the analysis of trends in the six decades prior to 1928” (Gordon 2016: 536). For Gordon, the Great Leap must be explained from a long-term perspective, by the innovations that were unleashed with the invention of electricity and the explosion motor, by the increased power of the unions during the New Deal and by the acceleration of inventions and innovations that occurred during the Great Depression, the three phenomena preceding World War II. And he sums up: “The case for interpretation of ‘economic support’ for World War II is very strong, expressing itself in all dimensions, from education to the GI Law on raising public spending financed by deficits that gave the new middle-class ability to buy the consumer goods that the Second Industrial Revolution provided.” (Gordon 2016: 537)

The great turning point in the American standard of living came after 1870. At that time, “the life of the housewives was characterized by staggering work, and of husbands, for dangerous and exhausting work. Life was short, large families crowded into small houses, much of the food and clothing was produced at home” (p.28). From 1870 to 1940, the breakthrough in the standard of living of the American working family did not occur in food and clothing, but in homes, which grew and became connected to water, electricity, sewerage, gas and, finally, telephones. Gordon (2016: 370) remarks “the pace of economic progress since the 1940s and particularly since 1970 was neither as

comprehensive nor as revolutionary as it was between 1870 and 1940. This is evident in relation to three basic needs: housing, clothing and feeding”. Gordon then goes on to describe the arrival of the automobile, air travel, amusements (mainly cinema, television, records or CDs) and the communications revolution, with the computer, e-mail, the internet, cell phone, streaming, advances in medicine, and the health care system. And he comes close to the pessimistic conclusion of secular stagnation, because the “headwinds to development” start to blow stronger. The most serious of them is the wind of inequality. The other headwinds that are reducing the growth rate of the American standard of living are education, which does not improve as it should, the aging population, increased public debt, and globalization, global warming and increasing pollution.

Gordon’s central argument for the long-term slowdown of the American economy is the simple fact that it changed from an industrial to service economy. It has grown fast while in the core of its growth was the manufacturing industry. This is the industry where the increase of productivity take place; not in the service industry. Gregory Clark (2016: 69), supporting Gordon’s view, notes that today services represent 80 percent of output, while the manufacturing industry, only 12 percent. Now, “most of R&D activity is still concentrated in manufacturing, a declining sector of the economy. In most of the economy – services and construction there is very little R&D activity”. As to the IT industry, Clark observes that “information and electronics manufactures, and software absorb nearly half of all R&D expenditures”, but it represents a small share of GDP, and “its size, measured as a share of value-added, is declining”.

Nicholas Crafts (2016: 58), reviewing Gordon, is skeptical in relation to the secular stagnation issue. According to his numbers, real GDP per person grew more in the period 1970-2007, than in the period 1950-1970. But, as Gordon notes in his response to Crafts, this one provides several new findings that complement the book. In the same table where are the conventional GDP per person numbers, Crafts adds a calculation of growth rates considering the fall of mortality rates and increased life expectancy. The numbers, according to Gordon, “supports the emphasis of the book on the great leap forward if TFP from 1929 to 1950”. Crafts questions the extraordinary progress in this period, but the fact is that the New Deal and the World War II were a period when a developmental strategy based in huge state investments in the infrastructure and government regulations that encouraged private investment and innovation.

He could not explain how profits remain high as capitalism moves into stagnation. He recognizes that they are high, but companies don’t increase their investments to expand production. His central thesis is that the innovations of the Second Industrial Revolution, from light and tap water in homes to cars and air travel, were more striking in terms of improving quality of life, employment, and in requiring increase of investments, than the innovations of the Third Industrial Revolution. This can be readily observed, especially in relation to investments, which in the rich countries have not been sustained at a high level since the 1970s. Machinery does not cease to replace workers, but this does not imply that production become more and more capital-intensive, as one would expect. One of the reasons must be that the great profits and the building of immense wealth for a few happened in the information and communication technology and in the internet, in Microsoft, Google and Facebook, without corresponding investments. The successful history of these companies had the effect of reducing the strong relationship between capital accumulation and growth.

## Demand side explanations

We have also the demand side explanations for secular stagnation, beginning with Marx. Although Marx did not leave a theory of the collapse of the capitalism on the side of the demand, he left a clue: the tendency to the overproduction or the underconsumption, that would be intrinsic to the capitalism. This is because Marx realized clearly that capitalism is not only a market economy, but a monetary economy in which the surplus value expressed in money is the essential. Capitalism does not imply exchange  $M - D - M'$  (commodity - money - more commodity), but an exchange  $D - M - D'$  (money - commodity - more money or profit). There is thus a purely monetary surplus, the profit, for which a destiny had to be given, because the very circular flow of production does not contain within it the demand to permit the sale of all production. Marx's analysis is complemented by the theory of disproportion, which is another way of expressing the capacity of the economy to absorb all production. For this, Marx divided the capitalist economy into two sectors: Department I, producer of capital goods, and Department II, producer of consumer goods, and described the economic cycle with them. In the expansion phase, Department I, which in the period of decline had almost been paralyzed, grows faster than Department II, which is due to a weak demand for consumer goods that is associated to wages growing slowly, or, in other words, by an insufficient growth in the demand for goods consumption by the workers. Once the demand for Department I goods is met, the continuation of its growth at a faster rate than Department II will lead to overproduction and then to paralysis of the investments, triggering the cyclical reversal.

Two economists, Rosa Luxemburg and John M. Keynes, have taken from this second thesis of Marx their fundamental theory. The first, in the context of Marxism, realized that, understanding the capitalist system as a closed system, consumers and investors would not constitute sufficient demand for the continuity of the accumulation process. She solved the problem with her theory of imperialism by taking advantage of the path that had been pioneered by John Hobson (1902) and Lenin (1917): colonies functioned as new markets to be occupied by production and surplus capital — without cost-effective implementation in central countries. In the same direction, another “outward” expansion for capitalism was war expenditures.

After capitalism overcame the crisis caused by the First World War, secular stagnation theories lost strength. In 1929, the liberal economic regime, which since the 1830s prevailed in the rich world, collapsed and the problem returned. It was Keynes who brought it back. In the first chapter of *The General Theory* he criticized Say's Law, the law of the circular flow of production, by which all production becomes profit or salary, which necessarily turn into investment or consumption and, in this way, supply would create their demand. The thesis was absurd from an empirical point of view and Keynes found an explanation for the fact that supply does not create its demand fully – a fact already recognized by Marx that in a capitalist economy money can be hoarded. Keynes knew Marx's theory and, in a preparatory work to *The General Theory*, referred in a complimentary manner to the  $D-M-D'$  system. But Keynes did not deduce much of the secular stagnation from this, except simply the tendency to cyclical economic and financial crises, which a fiscal and monetary policy could moderate. Paul Sweezy, in his *Theory of Capitalist Development* (1956: 222), associated Rosa Luxemburg with Keynes. "As the increase in capitalist consumption is a decreasing proportion of total accumulation, it follows that the growth rate of consumption declines relative to the rate of growth of the means of production". Sweezy devoted an entire chapter to the

counterbalancing forces of the underconsumption tendency and concluded that they avoided secular stagnation but not cyclical crises.

During the Golden Years of Capitalism, which were also the Keynesian years, theories of secular stagnation were once again left aside, if not forgotten, not only because growth was strong, but also because crises almost disappeared. Yet, from the 1980s, under a rentier-financier class coalition and globalization, capitalism returned to the pre-Keynesian regime of high financial instability; after the 2008 crisis and the Great Recession, the concern with secular stagnation roared back. In 2014, Lawrence Summers brought the theme back to life. He proposed that rich countries are no longer experiencing a mere economic cycle, and there are signs that we would face a problem of secular stagnation. In his words, “First, the United States and other industrial economies are currently having trouble in simultaneously achieving adequate growth, capacity utilization, and financial stability. Second, this must be related to a large drop in the natural rate of real interest.” He justifies this difficulty with several data: potential output has fallen, the employment-population ratio of people between 25 and 54 years old has been falling, the fall in total factor productivity has been caused by the decline in investment rather than the decline in technical progress, inflation did not accelerate despite the warming of the economy between 2002 and 2007. The warning was due to a credit bubble for housing construction rather than increased investment in production. Summing up, Summers has been unable to find any satisfactory growth since the beginning of the 21<sup>st</sup> century in the United States and other rich countries.

The central problem for Summers was the drop in the interest rates. How to explain it besides the central banks’ decision of engaging in quantitative easing? First, interest rates have fallen because there was a decrease in the demand for investments financed by debt. The cases of Google and Facebook are paradigmatic in relation to this problem. Their immense growth and transformation in quasi-monopolies in their respective areas required very little capital. Second, the decline in the population growth rate also causes a decrease in the demand for investments. Third, the concentration of income in the higher layer increased the propensity to save and increased the retained earnings of companies. Fourth, relative prices of capital goods fell in relation to other prices. Finally, there was a large increase in the countries’ international reserves, which also meant a decrease in investments. These five factors contributed to reducing investments that, in turn, caused the interest rate to fall. Is this a theory of secular stagnation? For this to be a theory it would be necessary, following Ricardo and Marx, that the profit rate expected by the companies be falling, but that did not happen. As Summers shows, the profit rate, which fell in the 1970s and, after a recovery, fell back moderately in the 1990s, has been rising since the early 2000s, but this has not led companies to invest more. In this way, the basic motivation for investments – a satisfactory difference between the expected profit rate and the interest rate – has not been confirmed in practice. The corporations have been investing little even though profits increased and interest rates fell.

Recent studies on financialization – on the importance of capital gains, dividends and interest payments as sources of income, on the role of short-termism and speculative investment have contributed to the understanding of the secular stagnation issue. Servaas Storm (2017: 186) uses a similar argument to explain the long-term fall of the growth rates in the United States. He calculated that “shifts in employment structure (measured in terms of industry shares in total hours worked) were insignificant... deindustrialization (measured in terms of declining share of hours worked in manufacturing in total hours worked) depressed aggregate productivity growth during 1995–2008 by 0.39 percentage points as compared to growth during 1948–1972”. Rather than a demand or a supply led

approach, this is a structural approach. For him, following Temin (2016, 2017) “America is no longer “great,” as its economic growth falters, nor “whole” because, as part of the secular stagnation itself, it is becoming a dual economy —two countries, each with vastly different resources, expectations, and potentials, as America’s middle class is vanishing”. Seconding Storm, William Lazonick (2017), argues the financialization of the business corporation is destroying the middle-class career employment and pushing an increasing proportion of the U.S. labor force into low-productivity and low-paid service jobs. Gerald Epstein (2018: 334) argues the increasing role for financial lending as a profit centre for non-financial corporations may be associated to the “lack of profitable investment opportunities in the non-financial sectors of the economy, which could be due to shorter-term forces of insufficient aggregate demand and to longer-term forces of ‘secular stagnation’”, but he remarks that “it seems unlikely that a single factor will be sufficient to explain all countries’ experiences.

### **Analyses on the left**

How does the left see the problem of secular stagnation? Michel Aglietta of the French School of Regulation, in review of Gordon's book in the *New Left Review* (2016, 124), was not convinced by the arguments put forward. For him, a new cycle of innovations is likely to take place, taking as its axis the large investments needed to cope with global warming and environmental pollution. Aglietta predicts that China will lead the process: “The industrial revolution that will be needed to mitigate environmental damage and adapt hostile habitats would involve transnational public goods, heavy investments, and institutions to deal with new systemic risks. Not only does China have an acute need, but also the financial resources and political will to allocate large savings reserves to this supreme priority.” Robert Boyer (2011: 153), from the same school of thought, sees also a way out for financialized capitalism: a neo-Schumpeterian wave of investments aiming to control global warming, which may be originated from the “developmental countries” like China that “progressively replace the United States in the role of pushing global growth”.

Wolfgang Streeck (2014: 46-47), in the same magazine, is less optimistic. For him three negative tendencies will lead capitalism to collapse: the increase of public debt and private debt (of consumers), the increase of inequality, and financial instability. Often, he says, we foresaw the end of capitalism, but this time the picture is different “because his most notable technicians do not know how to make him healthy again ... The image I have of the end of capitalism – an end that, I believe, is already underway – is that of a social system in chronic disarray, for reasons that are internal to it and independent of the existence of a viable alternative.” Five systemic disorders would define this chronic derangement: secular stagnation; the plutocracy, in that there is no prospect that the tendency to increase inequality will be interrupted; looting of public assets; fraud and corruption, which, according to Max Weber, have always been accompanied by covetousness; and the lack of a “safe center”, that is, of a hegemonic power that ensures order, given the loss of power by the United States. In a 2013 book, *Buying Time*, Streeck argues that capitalism postpones collapse by, successively, incurring in inflation, in increased public debt, and in increased private debt. Inflation is just a distortion, the rise in public debt is a response to the increase in government expenditures without increasing taxes; only the increase in the private debt is a way of buying time, because it keeps consumption strong, despite quasi-stagnant wages and low salaries. But besides perverse, is a dangerous way of postponing crisis. We know well that the substitution of private

debt for wages was one of the direct causes of the 2008 global crisis. Streeck (2013: 46) argues that the last forty years of consumer-based capitalism were essentially an attempt to free capitalism “from the kind of mass democracy that was part of the post-war democratic capitalism”. His analysis is fascinating, but it fails to account for its title: it is not a theory of its end, but rather an acute critique of capitalism.

Immanuel Wallerstein (2017: 53-54) also claims to have a theory of collapse. He believes that every system, and therefore capitalism (which he calls a “world-system”) follows a necessary trajectory consisting of “three phases: birth, long period of normal functioning, and inevitable structural crisis.” And he concludes that capitalism has already reached this last stage “because production costs have increased on a regular basis in relation to market prices (effective demand).” But this explanation is peculiar, to say the least. As productivity increases in capitalism, or in other words, as capitalism has so far shown increase in per capita income, production costs decreased and prices also decreased. Would profit margins have been reduced? There is no indication of such change. A long time ago, Paul Baran and Paul Sweezy (1966) titled their book, *Monopoly Capitalism*. After that, nothing changed toward “free enterprise”. The corporations don’t cease to get engaged into mergers and acquisitions whose core objective is monopolist power. More interesting is his thesis that long cycles within the normal phase “always end with the formation of a quasi-monopoly; now, quasi-monopolies are necessarily limited in time because they end up self-destructing.” This is true, but they only emphasize the cyclical and inherently unstable nature of capitalism.

### **The crucial problem**

Afterward, what to conclude in relation to secular stagnation? The fall in the profit rate predicted by Ricardo and Marx did not occur. On the supply side, the Marxian empirical literature on this problem is united on the fact that, despite the fall in the productivity of capital, the profit rate recovered. But it does not have a good explanation for it. This literature is equally consensual in relating the low growth rates to the quasi-stagnation of wages. Gordon’s explanation is also on the supply side, and is impressive, but eventually he does not say that capitalist economies are stagnant; they are just condemned to low growth. What is there to say on the explanations on the demand side? Marx’s D-M-D’ model, which is in the second volume of *Capital*, is not a theory of secular stagnation; it is just a way of criticizing Say’s law. Following a demand approach, Larry Summers’ analysis does not offer any historical new fact to explain the insufficiency of demand and the fall in the interest rates except that the employment-population ratio has been falling in rich countries.

Thus, the theories, either from the supply side or the demand side don’t predict persuasively secular stagnation. In Aglietta’s bet on a new frontier of innovation oriented to the protection of the environment rests the hope of a new long wave of growth or a fifth industrial revolution. But if the third and fourth industrial revolutions, respectively, the revolution of air travel and television, and the revolution of the information technology and the internet, didn’t bring fast growth, if the growth after the war is better explained by the optimism that took hold of capitalism after the victory over Nazism and the stability brought by the Bretton Woods agreement, why count on a fifth revolution? Besides low growth rates, what we see in the economies of the rich world are low investment rates, falling productivity of capital, financial instability, increasing inequality, quasi-stagnant wages, and zero growth in the standards of living of the poor. In politics, we see nations without a project, individuals without a utopia, frustrated

consumerism, social atomism, and radical individualism. Instead of secular stagnation, we see quasi-stagnation and political uneasiness if not anomie. How are we to explain it? What are the new historical facts?

From the discussion above, I believe that we must retain the key variables that don't lead to the collapse of capitalism but will keep it under permanent economic and political stress because defined by low growth rates, high financial instability, and increasing inequality maintain the rich economies growing little.

First, the fall of employment/population rate as a factor. The aging of the population is necessarily an obstacle to growth.

Second, we must retain Gordon's contention that the new innovations don't bring an improvement in the standards of living as big as the one brought by the new residences, with water and sewage, electricity, and household appliances equipment; by the automobile and air transportation.

Third, also on the supply side, the fall in the productivity of capital, of the output-capital ratio, is an important historical new fact contributing to low growth. The information and communication technology including the Internet instead of being associated with an increase in the productivity of labor and of capital, was associated to an increase in the productivity of labor and a fall in the productivity of capital; brought production costs down with the adoption of new machines that, instead of replacing less efficient machines, replaced new types of labor, but increased in capital-intensity of production. There was, initially, a great substitution of capital for office work; then, for bank work through ATMs; now, for all types of jobs through robots. The new machines are efficient enough to justify their purchase and replacement of new types of labor, but they are inefficient when compared to the machines previously adopted to replace previous types of work. The inevitable consequence was the fall in the output-capital relationship and either, the fall of the profit rate, or of the wage rate. The actual consequence was the quasi-stagnation of wages and of standards of living. Its cause was the reduction of demand for labor caused by the its substitution for capital.<sup>8</sup> The consequence was a new and powerful source of insufficiency of demand. One fact astutely expresses the contradictory character of the economy: the quasi-stagnation of wages is consistent with keeping satisfying the profit rates, but it threatens them as it produces insufficiency of demand.

Fourth, the *profusion* of accumulated capital. I mean by this the increase in the stock of capital and the dramatic increase in its liquidity. The increase in the stock of capital was negatively caused by the absence of great wars and depressions. As Thomas Piketty noted, before 1945 two great wars and the Great Depression destroyed capital on a large scale, thus for a time neutralizing the incessant process of capital accumulation that characterizes capitalism. After the 1970s' crisis, the profit rate recovered and the stock of capital resumed growth, now in a more stable way. The 2008 crisis could have been a major episode of capital purging, had the governments not adopted strong countercyclical or Keynesian macroeconomic policies. The fact that corporations relentlessly continue to buy back shares and to increase dividends is an acknowledgment of excess capital in relation to investment opportunities.

Fifth, the increased liquidity of capital derived from its securitization and from the printing of money by the main central banks. The surplus of capital, which is a post-war problem, combined with its high liquidity caused by the securitization of almost all fixed assets and by the practice of quantitative easing after the 2008 global financial crisis explain the power of finance as well as the increased risk of financial crises. The

securitization process – the transformation of capital in financial capital – involved a huge increase in debts combined with the change of the ownership of the companies and of the real-state wealth from households and from privately held companies to large corporations. This speculative - if not fraudulent - financialization led to the increase of fictitious capital and the multiplication of the wealth of rentier capitalists as they, oriented by financiers, “invested” in an always increasing public and, principally private debt. In this speculative process, big banks played an active role, because, as Robert Guttman (2008: 11) underlies, “the phenomenal expansion of fictitious capital has thus been sustained by banks directing a lot of credit towards asset buyers to finance their speculative trading with a high degree of leverage and thus on a much-enlarged scale”. What got more out of control was not the public debt, despite arguments by the liberal orthodoxy, but the private debt. While the public debt in rich countries is closely controlled, there are practically no controls on private debt, nor on the current account of the countries, due to the liberal belief, persistently falsified by the facts, that markets efficiently control the private debt.

This profusion of capitals in the hands of rentiers and financiers makes the search for investments opportunities more aggressive —and more frustrating. The privatization of state monopolies, which the market does *not* coordinate, was the more recent “solution” for the problem. After the war, one of the explanations for the growth of state-owned enterprises in infrastructure was the lack of private capital. Today, we see the opposite, as privatizations and new concessions of public services are increasing everywhere. Their owners are not business entrepreneurs but rentiers; profits don’t derive from innovation and risk but are mere rents.

Sixth, we must retain the competition originated from low-wage developing countries. Globalization was strongly supported by liberal economists and rich countries because it would improve the international allocation of resources and because it would reward the more efficient countries, which were supposed to be the rich ones. The opening of international markets and the great increase in international trade that happens from the 1980s benefited the low-wage developing countries that proved able to export manufactured goods. The competition waged by developing countries began in the 1970s, when Fordism was ending. The East Asian countries were the successful ones. First, the four “tigers” (South Korea, Taiwan, Singapore and Hong Kong); in the 1980s, Indonesia, Thailand and Malaysia; and from the 1990s, China. Their successful history is often attributed to industrial policy, but behind it was a competent developmental macroeconomic policy, which involved fiscal and exchange rate discipline, keeping the five macroeconomic prices right (the profit, the wage, the inflation, the interest, and the exchange rate, particularly the last one) and being spared from having to neutralize the Dutch disease, which is probably the main problem that other developing countries face. Their consequence on developing countries was unemployment in the manufacturing industry and deindustrialization.

Seventh, an encompassing new historical fact behind the poor economic performance of rich countries. I refer to the change, around 1980, of the economic policy regime from social-democratic developmentalism to economic liberalism. Development economists like Eric Reiner and Ha-Joon Chang criticized the West with the argument that they search to forbid developing countries to adopt the developmental policies that they adopted in the same level of development. They are right, but radical economic liberalism proved to be detrimental not only to developing but also to rich countries.

## Conclusion

In this paper, I first discussed shortly rentier-financier capitalism, made a survey of the recent debate on the possible secular stagnation of capitalism, and retained the new historical facts that don't cause stagnation, but reduced the investment and the growth rates, and explain why wages are growing below the increase of productivity. To maintain the profit rate satisfying, the neoclassical economic strategy was to obtain this reduction of wages through neoliberal reforms, while increasing the debt of the households, thus compensating the ensuing insufficiency of demand. On their part, the corporations increased substantially their market power. Deepening market power through mergers and acquisitions is an old capitalist practice. In the present case, its outcome was not to achieve extraordinary profits, but to keep them satisfying in unfriendly global economic conditions. This was the argument of Baran and Sweezy borrowed from Marx in the 1960s. After that, the process of concentrating capital continued strong. We are taught that the secret of capitalism efficiency is competition; there is a grain of truth in this argument, but it is also true that each corporation is permanently looking for monopolist advantages if not pure monopoly. As to the reduction of direct and indirect wages, rentier-financier capitalism recurs both to labor reforms, whose objective is to make labor contracts flexible, and the reduction of the social expenditures of the state.

Capitalism, therefore, faces a crisis of low growth and quasi-stagnant wages, which, on the supply side, derives from the information and communication revolution which is causing the fall of the productivity of capital. The "solution" found for the problem was, on one side, increasing monopolist power, and, on the other side, to introduce neoliberal reforms aiming at reducing direct and indirect wages, to keep the profit rate satisfying. Or, following Robert Gordon, the innovations associated with the Second Industrial Revolution and the corresponding increase of the standards of living were superior to those of the Third and Fourth Industrial Revolutions. On the demand side, stagnant wages are a problem, not a solution. Keynesian policies remain fundamental to solve the problem of excess capital in times of economic crisis. Outside crises, the rentier-financier elites adopt strategies to deal with the excess of capital either by resorting to mergers and acquisitions that increase monopoly power, by privatizing public monopolies, by increasing the consumers' debt, or by some combination of these. These are intrinsically perverse strategies, because they don't involve increase in investment. Instead, they involve increased inefficiency and inequality. The beneficiaries are a small but powerful class of rentier capitalists, financiers and senior executives. All this does not result in secular stagnation *sensu stricto*, but causes low growth associated with quasi-stagnating wages, the increase of inequality and the reduction of the growth rate. And it creates a growing popular dissatisfaction with globalization and rentier-financier capitalism, dominant since the 1980s.

## References

- Aglietta, Michel. "Globalisation financière," *L'Economie Mondiale 2000*, (Paris: La Découverte: 1999), 52-67.
- Aglietta, Michel. "America's slow down," *New Left Review*, 100, 2016: 119-128.
- Baran, Paul and Paul Sweezy. *Monopoly Capital*, New York: Monthly Review Press, 1966.
- Berle Jr., Adolf A. and Gardiner Means. *The Modern Corporation and Private Property*. New York: Macmillan, 1950. Original publication, 1932.

- Bernanke, Ben S. “The global saving glut and the US current account deficit”. *The Sandridge Lecture*, 2005, April 14.
- Boyer, Robert. “Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis,” *Economy and Society* 29(1), 2000: 111-145.
- Boyer, Robert. “Coherence, diversity, and the evolution of capitalisms – the institutional complementarity hypothesis”, *Evolutionary Institutions Economics* 2(1), 2005: 43-80.
- Boyer, Robert. *Les Financiers Détruiront-ils le Capitalisme?* Paris: Economica, 2011.
- Bresser-Pereira, Luiz Carlos. “A emergência da tecnoburocracia” [The rise of technobureaucracy]. Bresser-Pereira, L.C. *Tecnoburocracia e Contestação*, Petrópolis: Editora Vozes, 1972: 18-140.
- Bresser-Pereira, Luiz Carlos. *Lucro, Acumulação e Crise* [*Profit, Accumulation and Crisis*]. Second edition, São Paulo: Editora Cambury (Kindle e-book), 2018. Original in Portuguese, 1986.
- Bresser-Pereira, Luiz Carlos. *Globalization and Competition*, New York: Cambridge University Press, 2010.
- Bresser-Pereira, Luiz Carlos. “Reflecting on new developmentalism and classical developmentalism”, *Review of Keynesian Economics*, 4 (3), 2016: 331-352.
- Burnham, James. *The Managerial Revolution*. Bloomington: Indiana University Press, 1960. Original publication, 1941.
- Coutinho, Luciano and Luiz Gonzaga Belluzzo. “‘Financeirização’ da riqueza, inflação de ativos e decisões de gasto em economias abertas” [Wealth’s ‘financialization’, inflation of assets, and expenditure decisions in open economies], *Economia e Sociedade*, 11, December 1998: 137-150.
- Crafts, Nicholas. “The Rise and Fall of American Growth: Exploring the numbers”, *American Economic Review* 106(5), 2016: 57-60.
- Crouch, Colin. *The Strange Non-Death of Neoliberalism*. Cambridge: Polity Press, 2011.
- Drucker, Peter F. *The Age of Discontinuity*. London: Heinemann, 1968.
- Drucker, Peter F. “The rise of the knowledge society”, *Wilson Quarterly*, Spring 17 (2), 1993: 52-71.
- Durand, Cédric. *Fictitious Capital*, London: Verso, 2017. Original in French, 2014.
- Epstein, Gerald A. “Introduction: financialization and the world economy”, in Gerald A. Epstein, ed. (2005): 3-16.
- Epstein, Gerald A., ed. *Financialization and the World Economy*. Cheltenham: Edward Elgar, 2005.
- Epstein, Gerald A. “On the social efficiency of finance”, *Development and Change* 49(2), 2018: 330–352.
- Friedman, Milton. “The social responsibility of business is to increase its profits”, *New York Times Magazine*, September 13, 1970: 32.
- Galbraith, John Kenneth. *The New Industrial State*. New York: Mentor Books, 1979. Original publication 1967; revised in 1972.
- Gordon, Robert J. “US economic growth since 1870: One big wave?” *American Economic Review*, 89 (2), 1999: 123-128.
- Gordon, Robert J. “Is US economic growth over? Faltering innovation confronts the six headwinds”. *Robert J. Gordon NBER Working Paper*, n. 18315, 2012.

- Gordon, Robert J. “Perspectives on *The Rise and Fall of American Growth*”, *American Economic Review* 106(5), 2016: 72-76.
- Gordon, Robert J. *The Rise and Fall of American Growth*, Princeton: Princeton University Press, 2016.
- Guttmann, Robert. “A primer on finance-led capitalism and its crisis”, *Revue de la Régulation* 3/4, second semester 2008: digital edition, no page numbers.
- Guttmann, Robert. *Finance-Led Capitalism: Shadow banking, Re-Regulation, and the Future of Global Markets*. New York: Palgrave MacMillan, 2016.
- Hein, Eckhard *The Macroeconomics of Finance-dominated Capitalism – and its Crisis*. Cheltenham: Edward Elgar, 2012.
- Hilferding, Rudolf. *El Capital Financiero* [Financial Capital]. Madrid: Editorial Tecnos, 1963. Original German edition, 1910.
- Husson, Michel. “Le néolibéralisme: stade suprême?” [Neoliberalism: highest stage?], *Actuel Marx* 51, first semester, 2012 : 86-101.
- Koller, Tim, James Manuika and Sree Ramaswamy. “The case against corporate short termism”, McKinsey Institute, Milken Institute Review, August 2017. Accessed April 22/2017: <https://bit.ly/2xldB9Q>.
- Kotz, David M. *The Rise and Fall of Neoliberal Capitalism*. Cambridge: Harvard University Press, 2015.
- Lazonick, William. “The new normal is “maximizing shareholder value”: Predatory value extraction, slowing productivity, and the vanishing American middle class”, *International Journal of Political Economy* 46 (1), 2017: 217-226.
- Piketty, Thomas. *Le Capital au XXI<sup>me</sup> Siècle*. Paris: Seuil, 2013.
- Reenen, John Van. “Increasing differences between firms: market power and the macro-economy”. Paper presented at the 2018 Jackson Hole conference August 31st 2018.
- Stockhammer, Engelbert. “Financialisation and the Slowdown of Accumulation”, *Cambridge Journal of Economics* 28(5), 2004: 719–41.
- Storm, Servaas. “The new normal: demand, secular stagnation, and the vanishing middle class”, *International Journal of Political Economy*, 46(4), 2017: 169-210.
- Storm, Servaas. “Financialization and economic development: a debate on the social efficiency of modern finance”, *Development and Change* 49(2), 2018: 330–352.
- Streeck, Wolfgang. *Buying Time: The Delayed Crisis of Democratic Capitalism*. London: Verso, 2013.
- Streeck, Wolfgang. “How will capitalism end?” *New Left Review*, 87, 2014: 35-66.
- Summers, Lawrence. “US economic prospect: secular stagnation, hysteresis, and the zero lower bound”. *Business Economics*, 49 (2), 2014: 65-73.
- Sweezy, Paul M. *Teoria do Desenvolvimento Capitalista*. Rio de Janeiro, Zahar, 1962. Original edition 1942.
- Sweezy, Paul M. *Theory of Capitalist Development*. New York: Monthly Review Press, 1942.
- Temin, Peter. “The American dual economy: race, globalization and the politics of exclusion”, *International Journal of Political Economy* 45(2), 2016: 85–123.
- Temin, Peter. *The Vanishing Middle Class: Prejudice and Power in a Dual Economy*. Cambridge, MA: The MIT Press, 2017.

*The Economist*. “Power to the owners”, *The Economist*, Leader in the printed edition, March, 2013.

Wallerstein, Immanuel. *La Gauche Globale*. Paris, Maison des Sciences de l’Homme, 2017.

## Notes

<sup>1</sup> – Financial Times’ lexicon, <http://lexicon.ft.com/Term?term=secular-stagnation>. Retrieved 11 October 2018.

<sup>2</sup> – See Berle and Means (1932), Burnham (1941), John K. Galbraith (1967), Peter F. Drucker (1968, 1993), Bresser-Pereira (1972).

<sup>3</sup> – Lucas (2003). In a visit that Roberto Lucas made to São Paulo in the early 1990s I heard him utter practically the same phrase to a small group of economists.

<sup>4</sup> – The five macroeconomic prices are the interest rate, the wage rate, the exchange rate, the profit rate and the inflation rate. Keynes showed that the market is unable to get them right, and asked for fiscal and monetary policy; new developmentalism added the tendency to the cyclical and chronic overvaluation of the exchange rate and asked additionally for exchange rate policy (Bresser-Pereira, 2010, 2016).

<sup>5</sup> – As the prices of computers and, more recently, of robots are falling, and may have declined relative to the GDP deflator, there is the argument that the productivity of capital didn’t fall, but I am not persuaded.

<sup>6</sup> – For a survey of the great increase of monopoly power by the corporations see Van Reenen (2018).

<sup>7</sup> – Cédric Durand (2014: 123) offers a different explanation for the contradiction between the lagging productivity and satisfactory profit rates since the 1990s: financialization, whose “founding act” was the dramatic increase in the interest rates decided by Paul Volcker in 1979 as the president of the Federal Reserve Bank. Dating the neoliberal and financialization turn to this event is likely right, but we cannot deduce from it the increase in the profit margin. The old monopolist power remains a better explanation for the capacity to increase margins.

<sup>8</sup> – We already saw that the productivity of capital has been falling, and, so, to keep the profit rate satisfying, wages must grow below labor productivity. Assuming that the elasticity of substitution between labor and capital is around 1, the substitution of capital for labor will reduce the wage share and the wage rate.